Date: Tue, 15 Feb 94 20:11:17 PST

From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>

Errors-To: Info-Hams-Errors@UCSD.Edu

Reply-To: Info-Hams@UCSD.Edu

Precedence: Bulk

Subject: Info-Hams Digest V94 #157

To: Info-Hams

Info-Hams Digest Tue, 15 Feb 94 Volume 94 : Issue 157

Today's Topics:

6 Meter Big Wheel Ant? CFV: sci.geo.satellite-nav

Daily Summary of Solar Geophysical Activity for 13 February

Do NiMH Batteries Dev. Memories?
FCC Daily Digests for the
Golf Causes Cancer!

HDN Releases

HT Recs out there? (TH78A)
Noise Problem (2 msgs)
Schematic for Heathkit HW-2036A Needed
soldering PL-259 to coax
which is better qrp band--30 or 40?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu> Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu> Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 14 Feb 1994 17:54:08 GMT

From: ucsnews!newshub.sdsu.edu!usc!howland.reston.ans.net!math.ohio-state.edu!magnus.acs.ohio-state.edu!peri.acs.ohio-state.edu!rdixon@network.ucsd.edu

Subject: 6 Meter Big Wheel Ant?

To: info-hams@ucsd.edu

In article <henrysCL7yMn.H1x@netcom.com>, henrys@netcom.com (Henry B. Smith)
writes:

|> Has anybody ever seen the plans for a 6 Meter Big Wheel Antenna?

|>

|> If so, please pass along the reference.

I built several many years ago. Scaled the design up from two meter designs. Used half inch electrical conduit for the elements. They worked great, but are long since gone.

Bob W8ERD

Date: 15 Feb 1994 18:20:49 -0500 From: bounce-back@uunet.uu.net Subject: CFV: sci.geo.satellite-nav

To: info-hams@ucsd.edu

FIRST CALL FOR VOTES (of 2) unmoderated group sci.geo.satellite-nav

Newsgroups line:

sci.geo.satellite-nav Satellite navigation systems, especially GPS.

Votes must be received by 23:59:59 UTC, 8 March 1994.

After this CFV appears on news.announce.newgroups, it will be posted to the GPS Digest <gps-request@tws4.si.com>.

This vote is being conducted by a neutral third party. For voting questions only contact rdippold@qualcomm.com. For questions about the proposed group contact Andy Arkusinski <arkusinski_andy@si.com>.

CHARTER

This will be an unmoderated newsgroup.

SCI.GEO.SATELLITE-NAV was chosen because the focus of this group is on

navigation. The SCI.SPACE hierarchy deals with various aspects of space exploration and use, but this newsgroup deals mostly with terrestrial applications. The fact that the space segment is in space is almost incidental to the focus of the newsgroup.

SCI.GEO.SATELLITE-NAV will allow a centralized location for discussion of global navigation satellite systems (GNSS). The charter specifically includes the US Global Positioning System (GPS) and Russian GLONASS, but is also open to discussion of other existing and future satellite positioning systems.

Some topics that fall under this newsgroup charter are:

- * Technical aspects of GNSS operation.
- * User experiences in the use of GNSS.
- * Information regarding GNSS products.
- * Discussion of GNSS policy (such as GPS selective availability).
- * Extensions to basic GNSS technology, such as differential GPS and pseudolites.
- * Navigational uses of satellite systems whose primary purpose is not navigation, such as a communication satellite net.

Examples of topics that would not fall under the group charter are:

- * Other satellite systems such as communications and intelligence gathering, except for navigational uses of such systems.
- * Discussion of space policy in general.
- * Discussion of areas that may use GNSS, such as surveying, sailing, or aeronautics, except as they directly relate to use of GNSS.

GPS, in particular, has turned out to be a technology with a great deal of synergism with many fields. GPS is used, not only for military positioning which was the original purpose, but in applications as diverse as entomology and film making. A major intent of this newsgroup is to share the uses to which GNSS technology is being put, thus inspiring even more innovative uses.

While part of the SCI.GEO hierarchy, this newsgroup does not exclude non-terrestrial uses of satellite navigation. Use of GPS to determine space vehicle position is within the charter.

This group is also intended to function as a resource for newcomers, who can post their questions and receive help from others who have passed that way before.

Rationale: There is no single newsgroup where information on GPS and

other satellite navigation systems can be found. Questions are often posted in newsgroups such as sci.electronics, rec.aviation, and sci.aeronautics. To address this lack, the mailing list GPS Digest was started about a year ago, and now has over 400 subscribers.

Recently we attempted to convert GPS Digest from a moderated weekly newsletter to an unmoderated reflector. Submissions, which had been running at 2-3 per week, immediately picked up to 15 the first day. Our resources were overloaded, and the Digest is back to the original format. Many readers indicated the real-time response was helpful and suggested the formation of a newsgroup.

The RFD and CFV will be posted to the GPS Digest mailing list as well as Usenet newsgroups. Only those readers with access to Usenet should cast votes (for or against) formation of the newsgroup.

HOW TO VOTE

Send MAIL to: voting@qualcomm.com

Just Replying should work if you are not reading this on a mailing list.

Your mail message should contain one of the following statements:

I vote YES on sci.geo.satellite-nav I vote NO on sci.geo.satellite-nav

You may also ABSTAIN in place of YES/NO - this will not affect the outcome. Anything else may be rejected by the automatic vote counting program. The votetaker will respond to your received ballots with a personal acknowledgement by mail - if you do not receive one within several days, try again. It's your responsibility to make sure your vote is registered correctly.

Only one vote per person and per account will be counted. Addresses and votes of all voters will be published in the final voting results list.

Date: Mon, 14 Feb 1994 01:42:28 MST

From: swrinde!cs.utexas.edu!howland.reston.ans.net!sol.ctr.columbia.edu!destroyer!

nntp.cs.ubc.ca!alberta!ve6mgs!usenet@network.ucsd.edu

Subject: Daily Summary of Solar Geophysical Activity for 13 February

To: info-hams@ucsd.edu

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

13 FEBRUARY, 1994

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 044, 02/13/94 10.7 FLUX=097.8 90-AVG=106 SSN=072 BKI=4333 3553 BAI=024 BGND-XRAY=B2.5 FLU1=3.9E+06 FLU10=1.3E+04 PKI=4335 4554 PAI=028 BOU-DEV=052,023,028,031,038,075,075,034 DEV-AVG=044 NT SWF=00:000 XRAY-MAX= C1.3 @ 0245UT XRAY-MIN= B1.9 @ 1823UT XRAY-AVG= B4.2 NEUTN-MAX= +003% @ 2035UT NEUTN-MIN= -001% @ 1705UT NEUTN-AVG= +0.7% PCA-MIN= -0.3DB @ 0600UT PCA-MAX= +0.1DB @ 2040UT PCA-AVG= -0.0DB BOUTF-MAX=55359NT @ 0129UT BOUTF-MIN=55295NT @ 1832UT BOUTF-AVG=55336NT GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+062,+000,+000 GOES6-MAX=P:+122NT@ 1546UT GOES6-MIN=N:-080NT@ 0751UT G6-AVG=+084,+040,-032 FLUXFCST=STD:100,103,107;SESC:100,103,107 BAI/PAI-FCST=020,020,015/025,020,015 KFCST=3334 4433 3334 4433 27DAY-AP=020,022 27DAY-KP=4544 2333 3333 5533 WARNINGS=*GSTRM; *AURMIDWCH ALERTS=**SWEEP:IV=2@0051-0244-0429UTC !!END-DATA!!

NOTE: The Effective Sunspot Number for 12 FEB 94 was 24.2. The Full Kp Indices for 12 FEB 94 are not available. The 3-Hr Ap Indices for 12 FEB 94 are not available.

SYNOPSIS OF ACT

Solar activity was low. Two C1 x-ray events were observed this period; the first was correlated with a SF flare from Region 7668 (N08W17) with a maximum at 12/2346. Since the flare, 7668 has shown some decay, particularily in the trailer portion of the group. The second C1 event began at 13/0051Z, maxed at 13/0244Z and finally ended at 13/0429Z. It was optically uncorrelated. Culgoora reported a Type IV sweep with start and end times at 13/0159Z and 13/0234Z respectively. One

Solar activity forecast: solar activity is expected to be low. Rgn 7668 and Region complex 7670 (N09E60) and rgn 7671 all have the potential to produce C-class activity.

new region was numbered this period -- Rgn 7671 (N11E75).

At middle latitudes, the geomagnetic field has been mostly

unsettled to active with some minor storm conditions reported during the past 24 hours. High latituds conditions have been at mostly unsettled to minor storm levels with some stations reporting major to severe storm conditions.

Geophysical activity forecast: the geomagnetic field is expected to persist at mostly unsettled to active levels with periods of minor to major storm conditions likely. Conditions are expected to moderate to mostly unsettled on day three of the forecast period.

Event probabilities 14 feb-16 feb

Class M 05/10/15 Class X 01/01/01 Proton 01/01/01 PCAF Green

Geomagnetic activity probabilities 14 feb-16 feb

A. Middle Latitudes

Active	35/25/20
Minor Storm	15/05/05
Major-Severe Storm	05/01/01

B. High Latitudes

Active	40/30/25
Minor Storm	25/10/10
Major-Severe Storm	10/05/01

HF propagation conditions persisted below-normal over all regions. Hardest hit continue to be the upper middle to polar latitudes where occasional near-useless propagation conditions have existed at some times of the day. No significant changes are expected over the next 72 hours, although a very gradual trend toward improving conditions is expected, particularly after approximately 15 or 16 February. High latitudes will require several additional days to recover from this rather influential disturbance.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE 7666 N16W83 350 0040 HSX 02 001 ALPHA

7668 N08W17 284 0070 DAO 10 018 BET
7669 N06E44 223 0000 AXX 00 001 ALPHA
7670 N09E60 207 0000 AXX 00 001 ALPHA
7671 N11E75 192 0060 HSX 02 001 ALPHA
7667 S07W67 334 PLAGE
REGIONS DUE TO RET
NMBR LAT

7659 S13 150

LISTING OF SOLAR ENERGETIC EVENTS FOR 13 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP 0051 0244 0429 C1.3 IV 1056 1056 1057 140 220

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 13 FEBRUARY, 1994

 BEGIN
 MAX
 END
 LOCATION
 TYPE
 SIZE
 DUR
 II
 IV

 13/ 0051
 0244
 0429
 LDE
 C1.3
 218
 2

INFERRED CORONAL HOLES. LOCATIONS VALID AT 13/2400Z

ISOLATED HOLES AND POLAR EXT

EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN

NO DAT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz ----- 12 Feb: 2337 2346 2354 C1.0 SF 7668 N07W03

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

Total Events: 001 optical and x-ray.

Begin Max End Xray Op Region Locn Sweeps/Optical Observations ---- ---- -- ---------- ---- ---------NO EVENTS OBSERVED.

NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

= Type II Sweep Frequency Event II

III = Type III Sweep TV = Type IV Sweep = Type V Sweep

Continuum = Continuum Radio Event Loop = Loop Prominence System,

Spray = Limb Spray,
Surge = Bright Limb Surge,

EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

Date: Tue, 15 Feb 1994 19:43:16 GMT

From: news.cerf.net!pagesat.net!olivea!spool.mu.edu!howland.reston.ans.net! vixen.cso.uiuc.edu!sdd.hp.com!col.hp.com!srgenprp!alanb@network.ucsd.edu

Subject: Do NiMH Batteries Dev. Memories?

To: info-hams@ucsd.edu

Bill Coleman (bcoleman@hayes.com) wrote:

: The best thing you can do about NiCd memory is to forget it.

(I love it!)

On the subject of nicads, I have been reading all the magazine articles, Internet postings and old wives tales for many years trying to figure out the true story on nicad longevity. I eventually came to exactly the same conclusion as Bill:

: Two rules for long NiCd life: don't overheat them by overcharging; don't : discharge them too deeply, or you may get cell reversal in the pack.

And under the "discharging too deeply" category, be careful of nicads that have sat (charged) on the shelf for a long time. Often one of the cells has discharged more than the others. To prevent cell reversal, always recharge such a battery pack before using.

AL N1AL

Date: 13 Feb 94 14:21:00 GMT

From: hotmomma!brent!steve.allen@uunet.uu.net

Subject: FCC Daily Digests for the

To: info-hams@ucsd.edu

bruce@pixar.com (Bruce Perens) writes, and writes, and writes:
[cable-tv, broadcast FM, commercial microwave, satellite pager
drivel omitted...

Bruce: besides being 99.9% irrelevant to amateur radio, this is an incredible waste of bandwidth. If you feel a need to post this stuff, form your own newsgroup.

-Steve N2WSA

- - -

. QMPro 1.51 . There is no bad weather-- only bad clothing

- - - -

The Brentwood BBS! 12 Nodes (914)-381-1600

Date: 13 Feb 94 01:53:21 GMT

From: swrinde!cs.utexas.edu!math.ohio-state.edu!cyber2.cyberstore.ca!nwnexus!ole!

rwing!eskimo!mzenier@network.ucsd.edu

Subject: Golf Causes Cancer!

To: info-hams@ucsd.edu

In <CKz4HD.9KD@srgenprp.sr.hp.com>, Alan Bloom wrote:

: Steve Coletti (bigsteve@dorsai.dorsai.org) wrote:

: : I'd venture a guess that the death rate is probably due to the exposure

: : to chemicals and insecticides used in grounds keeping.

: I suppose, although I doubt they use much insecticide on golf courses.

: (They're mostly grass, aren't they?)

Yes, but it has to be perfect grass. They put so much crud on golf courses that it made "60 Minutes" when a golfer died from a reaction to the fungicide that had been spread.

As an example, Diazanon, used for Crane Fly uses 3/4 cup concentrate for 500 square feet. When used on apples to control Codling Moth, it's one tablespoon diluted in a gallon of water. (For me, this covers 3 semidwarf trees. And you usually get a headache if the wind blows the spray back at you. And you can't eat the apples for two weeks.) The Crane Fly larva eats grass roots. I think they've delisted this use. I sure as hell wouldn't want to drink well water from under a golf course.

Mark Zenier mzenier@eskimo.com markz@ssc.com

Date: Sun, 13 Feb 1994 07:57:08

From: swrinde!cs.utexas.edu!news.unt.edu!news.oc.com!utacfd.uta.edu!rwsys!ocitor!

FredGate@network.ucsd.edu Subject: HDN Releases To: info-hams@ucsd.edu

The following files were processed Sunday 02-13-94:

525172 bytes in 1 file(s)

```
HAMPACK [ HAM: Packet Communications programs ]

VESTER-A.ZIP ( 525172 bytes) SSTV/FAX480/WEFAX System for IBM &

Clones by K3BC
```

Total of 525172 bytes in 1 file(s)

Files are available via Anonymous-FTP from ftp.fidonet.org IP NET address 140.98.2.1 for seven days. They are mirrored to ftp.halcyon.com and are available for 60-90 days.

```
Directories are:
```

```
/hamelec (Formulas)
/hamtrain (Training Material)
/hamlog (Logging Programs)
/hamcomm (APLink/JvFax/Rtty/etc)
/hammods (Equip modification)
/hamswl (SWBC Skeds/Frequencies)
/hamscan (Scanner Frequencies)
/hamutil (Operating aids/utils)
/hamsrc (Source code to programs)
/hamdemo (Demos of new ham software)
/hamnos (TCP/IP and NOS related software)
```

Files may be downloaded via land-line at (214) 226-1181 or (214) 226-1182. 1.2 to 16.8K, 23 hours a day .

When ask for Full Name, enter: Guest; guest <return>

lee - ab5sm

Ham Distribution Net

* Origin: Ham Distribution Net Coordinator / Node 1 (1:124/7009)

Date: Tue, 15 Feb 1994 14:55:25 GMT

From: gulfaero.com!vixen.cso.uiuc.edu!howland.reston.ans.net!cs.utexas.edu!

geraldo.cc.utexas.edu!portal.austin.ibm.com!awdprime.austin.ibm.com!

blood@network.ucsd.edu

Subject: HT Recs out there? (TH78A)

To: info-hams@ucsd.edu

A comment on the TH78A. I think it is a great radio with the following exceptions: 1: Cannot be used on external antenna on 2M due to horriffic intermod problems.

2: The battery release latch will occasionally trip when wearing on your belt, resulting in an unplanned battery drop test.

Date: Tue, 15 Feb 1994 22:13:29 GMT

From: ukma!rsg1.er.usgs.gov!dgg.cr.usgs.gov!bodoh@seismo.css.gov

Subject: Noise Problem To: info-hams@ucsd.edu

In article <2jqq6i\$glg@vixen.cso.uiuc.edu>, ignacy@ux2.cso.uiuc.edu (Ignacy

Misztal) writes:

- |> Sources of broadband noise in my house:
- |> 1. Light dimmers,
- |> 2. TV set,
- |> 3. Fluorescent lights.
 - 4. Kids
 - 5. Wife
 - 6. Me after discovering 3 yr old reprogramming a scanner

- -

- + Tom Bodoh Sr. systems software engineer, Hughes STX, NOYGT
- + USGS/EROS Data Center, Sioux Falls, SD, USA 57198 (605) 594-6830 +
- + Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66) +
- + "Welcome back my friends to the show that never ends!" EL&P

Date: 15 Feb 1994 15:36:50 GMT

From: gulfaero.com!vixen.cso.uiuc.edu!ux2.cso.uiuc.edu!ignacy@network.ucsd.edu

Subject: Noise Problem To: info-hams@ucsd.edu

Sources of broadband noise in my house:

- 1. Light dimmers,
- 2. TV set,
- 3. Fluorescent lights.

Ignacy Misztal, NO9E, SP8FWB ignacy@uiuc.edu

Date: 16 Feb 94 00:39:31 GMT From: news-mail-gateway@ucsd.edu

Subject: Schematic for Heathkit HW-2036A Needed

To: info-hams@ucsd.edu

I seem to have caused serious injury to a Heathkit HW-2036A. I have all the documentation EXCEPT the schematic, which is, of course, what I need the most to fix the beast. :-) Does anyone out there have a schematic for this radio they would kindly copy for me? I will, of course, pay reasonable copy/mailing costs.

I've made some mods that will make this a great packet radio if I can get it back on line. :-)

To be a second of the second o

Wm. A. Kirsanoff Internet: WAKIRSAN@ananov.remnet.ab.com

Rockwell International Ham: KD6MCI

(714) 762-2872

Date: 14 Feb 1994 18:29:55 GMT

From: ucsnews!newshub.sdsu.edu!usc!howland.reston.ans.net!wupost!crcnis1.unl.edu!

unlinfo.unl.edu!mcduffie@network.ucsd.edu

Subject: soldering PL-259 to coax

To: info-hams@ucsd.edu

wolfman@p-cove.UUCP (Aaron Smith) writes:

> I have had real good luck with a little 5 watt iron. All I do is let it >heat up for a while, then hold it on the pl-259 and the coax shielding on >the inside. If I wait like that for about a minute, and then melt the solder >on the tip and let it run into the hold and wait another min, I get a >real good connection.

Wow, Aaron! You must grow some big watts in your neck of the woods.

Seriously, you are better off using a large capacity heat source, such as the 250+ watt gun, because the longer you keep that heat on the connector, the more likely it is that the center conductor will migrate. My technique is to get it hot, melt the solder, and get it cooled down, as quickly as practical. By the way, if you use cheap connectors, you will also notice that the insulator that holds the center pin will melt and the pin will sag. Use Amphenol. Hold the cable and connector still until the end of the cable is cooled so the center won't migrate. Scotchkote, tape, and more Scotchkote to seal for outside connections.

GL and 73, Gary (other one again!)

Date: Fri, 11 Feb 1994 17:29:07 GMT

From: ucsnews!newshub.sdsu.edu!usc!howland.reston.ans.net!vixen.cso.uiuc.edu!

sdd.hp.com!hpscit.sc.hp.com!hplextra!hpldsla!brunob@network.ucsd.edu

Subject: which is better qrp band--30 or 40?

To: info-hams@ucsd.edu

You will be much better off by using 30m for followin reasons.

40 is segmentaized e.m. different ITU zones can operate only on certain freq. or segments of the 40m band.

40 has Broadcasts and other QRM working against QRP.

On 40 "other" station can use 1KW so ham to ham QRM is a factor.

30 is 'NEW' and same freq. for all ITU. Very little QRM On the edge of muf Max power is 100w Beam fix or rotatebl is feasable and in my opinion a must for QRP.

Try it you may like it!!!!!

from the log of AA6AD

End of Info-Hams Digest V94 #157 ******** ********